

PATENT  
Attorney Docket: 678-506 (P9382)

### REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-10 are pending in this application. The Office Action rejected Claim 1 under 35 U.S.C. §103(a) over Takei (US 5,585,807) in view of Saldell (US 5,661,495) and further in view of Phillips et al. (US 5,572,223); rejected Claims 2-5 under 35 U.S.C. §103(a) over Takei, Saldell, Phillips et al., and further in view of Egashira (US 5,262,792); and rejected Claims 6-10 under 35 U.S.C. §103(a) over Takei, Saldell, Phillips et al., and further in view of Chatzipetros (US 5,554,996).

Claim 1 has been amended. It is respectfully submitted that no new subject matter is presented by this amendment.

There are three independent claims pending in this application, Claims 1, 6 and 10. Claim 1 was rejected in view of the combination of Takei, Saldell and Phillips et al. Claims 6 and 10 were rejected in view of Takei, Saldell, Phillips et al. and the additional reference of Chatzipetros.

Takei discloses a portable radio terminal that is under  $\frac{1}{4}$  wavelength in length. The terminal of Takei has a body and an internal, i.e. built-in, antenna which is formed in various step structures for purposes of lowering input impedance and making easier "the matching of an antenna having high impedance originally with an exciting source having low impedance" (Col. 2, lines 48-50). The Examiner admitted that Takei fails to clearly indicate "the conductor, the printed circuit board ... such that the electrical length, of the portable terminal, is  $\frac{1}{2}$  wavelength" (Office Action, bottom of page 2).

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Saldell was cited as allegedly curing the defect of Takei failing to disclose an electrical equivalent length of  $\frac{1}{2}$  wavelength. Saldell teaches a portable terminal having both a retractable straight antenna (1) of  $\frac{1}{4}$  wavelength and a helical antenna (6). The antennas of Saldell alternately connect, depending upon whether the straight antenna (1) is retracted or extended, to a conductor (21). Saldell teaches that the helical antenna (6) has a "lower antenna performance, but [is] considerably less bulky" than the retractable antenna (1) (Col. 1, lines 49-51), and accordingly discloses means for directly connecting the helical antenna (1) with the conductor (21) to enhance the performance of its helical antenna (6) (see Figs. 5C and 5E, and Col. 2, lines 39-40, "a helical antenna gives insufficient performance").

Phillips et al. was cited by the Examiner in regard to the failure of Takei and Saldell to disclose a "conductor connected to the printed circuit board" (Office Action, bottom of page 3).

Claim 1, as amended, includes the recitation of *a conductor connected to a printed circuit board disposed within the terminal body such that an electrical equivalent length of the portable radio terminal is  $\frac{1}{2}$  wavelength, thereby dispersing a peak current distribution point*. It is respectfully submitted that the cited references of Takei, Saldell and Phillips et al. fail, both alone or in combination, to teach or suggest at least the recitation of *dispersing a peak current distribution point*. By *dispersing a peak current distribution point*, the portable radio terminal apparatus of amended Claim 1 will reduce harm to the user caused by electromagnetic radiation.

Regarding independent Claims 6 and 10, Claims 6 and 10 were rejected in view of Takei, Saldell, Phillips et al. and Chatzipetros. Chatzipetros was cited as allegedly curing the

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admitted defect that nowhere in any of Takei, Saldell or Phillips et al. is a "conductor integrated with the flip" clearly indicated (Office Action, bottom of page 5).

Contrary to the Examiner statement that it would have been "obvious to include Chatzipetros's parasitic radiator for providing antenna diversity when flap is either open or closed" (Office Action page 6, emphasis supplied), it is well recognized that "antenna diversity" relates to switching between multiple antennas. Antenna diversity does not relate to combining conductive assemblies to form a single antenna.

The parasitic antenna of Chatzipetros merely performs a diversity function. In contrast, the portable radio terminal apparatus of Claims 6 and 10 connects the conductor integrated with the flip and the antenna of the terminal body to create a single antenna circuit having an equivalent ground length longer than  $\frac{1}{4}$  wavelength (Claim 6) or  $\frac{1}{2}$  wavelength (Claim 10) for dispersing a *peak current distribution point*.

Accordingly, Chatzipetros fails, both alone or when combined with Takei, Saldell and Phillips et al., to disclose or suggest the portable radio terminals claimed in Claim 6 and Claim 10.

Without conceding the patentability *per se* of dependent Claims 2-5 and 7-9, for at least the above reasons it is respectfully submitted that all of the pending claims, i.e. Claims 1-10, are in condition for allowance.

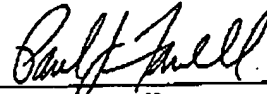
Finally, the Office Action objected to the as-filed Figures and included a *Notice Of Draftsperson's Patent Drawing Review* dated February 12, 2002. The *Notice Of Draftsperson's Patent Drawing Review* objected to the quality of Figures 1A, 16A, 16B and

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16C that were originally filed. Accordingly, to overcome this objection, filed herewith is a *Request For Approval of Replacement Figures* providing replacement formal drawing sheets 1/15, 13/15, 14/15 and 15/15, which include Figures 1A, 1B, 16A, 16B and 16C.

If the Examiner has any questions regarding this communication, the Examiner is requested to contact the undersigned.

Respectfully submitted,



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